

WHAT IS CLAIMED IS:

1. A method for responding to a content request received from a requesting client machine, comprising:
 - receiving a first content request from the requesting client machine;
 - 5 generating second content request based on the first content request;
 - transmitting the second content request to at least one secondary server;
 - receiving content corresponding to the second content request from at least one of the at least one secondary server; and
 - 10 forwarding to the requesting client machine the received content as the content corresponding to the first content request.
2. The method of claim 1, further comprising:
 - determining, before generating the second content request, if the content corresponding to the first content request is locally available; and
 - 15 forwarding the locally-available content as the content corresponding to the first content request in place of performing the generating, transmitting, receiving and received content forwarding steps.
3. The method of claim 2, further comprising locally storing the received content corresponding to the second content request, the locally-stored received content being locally available to a subsequent content request from the requesting client machine requesting content at least similar to the first content request.
- 20 4. The method of claim 3, further comprising:
 - determining, if the content corresponding to the first content request is locally available, whether to update the locally available content corresponding to the
 - 25 first content request;
 - forwarding the locally-available content as the content corresponding to the first content request in place of performing the generating, transmitting, receiving and received content forwarding steps if the locally available content is not to be updated; and
 - 30 performing the generating, transmitting, receiving and received content forwarding steps if the locally available content is to be updated.

5. The method of claim 4, wherein determining whether to update the locally available content corresponding to the first content request comprises at least one of:

determining if the locally available content corresponding to the first content request is older than an update age;

determining if the locally available content corresponding to the first content request is a type of content that is to be update automatically;

determining if the locally available content corresponding to the first content request includes expiration information; and

determining if the content request includes an indication to update the locally available content.

6. The method of claim 4, further comprising:

determining whether at least one secondary server is known to store at least a type of content that corresponds to the content corresponding to the first content request based on a stored content map;

searching, if at least one secondary server is not known a plurality of secondary servers to identify at least one secondary server that contains at least a type of content that corresponds to the content corresponding to the first content request;

adding, in response to the searching step, to the stored content map the at least one identified secondary server located by the search; and

transmitting, based on the at least one secondary server identified in the content map, the second content request to that at least one secondary server in response to either the adding step or the at least one secondary server determining step.

7. The method of claim 2, further comprising:

determining whether at least one secondary server is known to store at least a type of content that corresponds to the content corresponding to the first content request based on a stored content map;

searching, if at least one secondary server is not known a plurality of secondary servers to identify at least one secondary server that contains at least a type of content that corresponds to the content corresponding to the first content request;

adding, in response to the searching step, to the stored content map the at least one identified secondary server located by the search; and

transmitting, based on the at least one secondary server identified in the content map, the second content request to that at least one secondary server in response to either the adding step or the at least one secondary server determining step.

8. The method of claim 1, further comprising:

5 determining whether at least one secondary server is known to store at least a type of content that corresponds to the content corresponding to the first content request based on a stored content map;

searching, if at least one secondary server is not known a plurality of secondary servers to identify at least one secondary server that contains at least a type of content that corresponds to the content corresponding to the first content request;

10 adding, in response to the searching step, to the stored content map the at least one identified secondary server located by the search; and

transmitting, based on the at least one secondary server identified in the content map, the second content request to that at least one secondary server in response to either the adding step or the at least one secondary server determining step.

15 9. The method of claim 1, further comprising locally storing the received content corresponding to the second content request.

10. The method of claim 9, further comprising:

20 determining whether at least one secondary server is known to store at least a type of content that corresponds to the content corresponding to the first content request based on a stored content map;

searching, if at least one secondary server is not known a plurality of secondary servers to identify at least one secondary server that contains at least a type of content that corresponds to the content corresponding to the first content request;

25 adding, in response to the searching step, to the stored content map the at least one identified secondary server located by the search; and

transmitting, based on the at least one secondary server identified in the content map, the second content request to that at least one secondary server in response to either the adding step or the at least one secondary server determining step.

30 11. A system usable to respond to a content request received from a requesting client machine, comprising a proxy server able to receive the content request and generate and transmit a second content request to at least one secondary server and able to receive the content from at least one of the at least one secondary server and

transmit the received content to the requesting content machine as the content corresponding to the requesting client machine.

12. The system of claim 11, further comprising a storage device usable to store content locally relative to the proxy server.

5 13. The system of claim 12, wherein the proxy server determines whether content corresponding to the first content request is stored in the storage device, such that, when content corresponding to the first content request is stored in the storage device, the proxy server transmits the content stored in the storage device corresponding to the first content request to the requesting client machine as the content corresponding to the first content request.

14. The system of claim 12, wherein the proxy server determines, for a particular content stored in the storage device, whether to update that particular content stored in the storage device in response to receiving a content request to which that particular content corresponds.

15 15. The system of claim 14, wherein, when the proxy server determine to update the content, the proxy server transmits a second content request to which that particular content corresponds to at least one secondary server.

16. The system of claim 12, further comprising a content map that indicates, for at least some content requests, at least one secondary server known to store at least a type of content that corresponds to that content request.

17. The system of claim 16, wherein the proxy server determines the at least one secondary server to which the second content request is transmitted based on the content map.

25 18. The system of claim 16, wherein the proxy server determines whether the content map indicates at least one secondary server known to store at least a type of content that corresponds to the content corresponding to the first content request, the proxy server generating a search of a plurality of secondary servers if the content map does not indicates at least one secondary server known to store at least a type of content that corresponds to the content corresponding to the first content request, the proxy server updating the content map based on results of the search.

30 19. The system of claim 11, further comprising a content map that indicates, for at least some content requests, at least one secondary server known to store at least a type of content that corresponds to that content request.

20. The system of claim 19, wherein the proxy server determines the at least one secondary server to which the second content request is transmitted based on the content map.

21. The system of claim 19, wherein the proxy server determines whether
5 the content map indicates at least one secondary server known to store at least a type of content that corresponds to the content corresponding to the first content request, the proxy server generating a search of a plurality of secondary servers if the content map does not indicates at least one secondary server known to store at least a type of content that corresponds to the content corresponding to the first content request, the proxy
10 server updating the content map based on results of the search.

22. A system usable to respond to a content request received from a requesting client machine, comprising:

means for receiving a first content request from the requesting client machine;
15 means for generating and transmitting a second content request to at least one secondary server corresponding to the first content request;
means for receiving content corresponding to the second content request from at least one of the at least one secondary server; and
means for transmitting the received content to the requesting content
20 machine as the content corresponding to the first content request.

23. The system of claim 23, further comprising storing means for storing content locally relative to the means for receiving.

24. The system of claim 23, further comprising means for determining whether content corresponding to the first content request is stored in the storing means,
25 such that, when content corresponding to the first content request is stored in the storing means, the means for transmitting the received content transmits the content stored in the storage means corresponding to the first content request to the requesting client machine as the content corresponding to the first content request.

25. The system of claim 23, further comprising updating means for
30 determining, for a particular content stored in the storing means, whether to update that particular content stored in the storing means in response to receiving a content request to which that particular content corresponds.

26. The system of claim 25, wherein, when the updating means determines to update the content, the means for generating and transmitting transmits a second content request to which that particular content corresponds to at least one secondary server.

5 27. The system of claim 23, further comprising a content map that indicates, for at least some content requests, at least one secondary server known to store at least a type of content that corresponds to that content request.

28. The system of claim 27, wherein the means for generating and transmitting determines the at least one secondary server to which the second content request is transmitted based on the content map.

10 29. The system of claim 27, wherein the means for generating and transmitting determines whether the content map indicates at least one secondary server known to store at least a type of content that corresponds to the content corresponding to the first content request, the means for generating and transmitting generating a search of a plurality of secondary servers if the content map does not indicates at least one secondary server known to store at least a type of content that corresponds to the content corresponding to the first content request, the means for generating and transmitting updating the content map based on results of the search.

15 30. The system of claim 22, further comprising a content map that indicates, for at least some content requests, at least one secondary server known to store at least a type of content that corresponds to that content request.

31. The system of claim 30, wherein the means for generating and transmitting determines the at least one secondary server to which the second content request is transmitted based on the content map.

25 32. The system of claim 30, wherein the means for generating and transmitting determines whether the content map indicates at least one secondary server known to store at least a type of content that corresponds to the content corresponding to the first content request, the means for generating and transmitting generating a search of a plurality of secondary servers if the content map does not indicates at least one secondary server known to store at least a type of content that corresponds to the content corresponding to the first content request, the means for generating and transmitting updating the content map based on results of the search.

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